

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. A genetically engineered mammalian cell that has
been mutated by a process comprising the insertion of a
recombinantly manipulated polynucleotide sequence into a
gene in said genetically engineered mammalian cell wherein
said gene is identifiable as corresponding to at least one
of SEQ ID NOS: 1-891.
- 10 2. The genetically engineered mammalian cell of Claim
1, wherein said cell is murine.
- 15 3. A cell according to Claim 2, wherein said cell is
an embryonic stem cell.
- 20 4. The genetically engineered mammalian cell of Claim
1, wherein said polynucleotide sequence is present on a
viral vector.
5. A cell according to Claim 4, wherein said viral
vector is a retroviral vector.
- 25 6. A cell according to Claim 4, wherein said viral
vector additionally comprises regions of targeting DNA that
facilitate gene targeting by homologous recombination.
- 30 7. An isolated murine embryonic stem cell line
comprising an engineered retroviral gene trap vector in at
least one gene comprising a polynucleotide sequence first
disclosed in one of SEQ ID NOS: 1-891.